

Commonwealth of Massachusetts

Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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February 6, 2019

Mr. Daniel O'Neill, P.E. Executive Director Lynn Water & Sewer Commission 400 Parkland Avenue Lynn, MA 01905-1138

RE:

Third Modified Consent Decree Civil Action No. 76-cv-02184-RGS

LWSC Infiltration Inflow (I/I) Program

Dear Mr. O'Neill:

The Massachusetts Department of Environmental Protection (MassDEP) has received the December 28, 2018 Flow Metering Program and Sewer System Evaluation and Rehabilitation Prioritization Report. This Report was submitted on your behalf by Weston and Sampson Engineers (WSE). MassDEP has reviewed the information in the Report and provides the following comments.

General

The I/I metering program focused on those areas of the Commission's collection system where there are separate sewer and storm drain systems. However, where there is excessive I/I in these areas of the system, such flows will in turn exacerbate combined sewer overflows from the Commission's four CSO outfalls. WSE has indicated that the work was carried out in accordance with MassDEP's I/I guidance. Meter areas 1 – 7 flow to the Western Interceptor which is relieved by CSO 003, the Commission's most frequent CSO outfall, and Meter areas 8 – 14 are in the sewer areas tributary to CSO 006, which discharges when active to an outfall on King's Beach.

The Commission remains under the terms of the Third Modified Consent Decree (TMCD), which requires the Commission to move forward with CSO abatement work, and to undertake other actions, including further I/I abatement work. The I/I abatement work should be done in close coordination with the CSO abatement work, so that the expected benefits of the

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

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CSO control work are fully achieved, which should include sharing flow meter data and scoping of I/I abatement work with the Commission's design consultant for the CSO control work.

I/I Flow Metering and I/I Prioritization Report

Based on a review of the I/I Report, additional information is needed before MassDEP can approve the I/I Plan. Additional information required by MassDEP, includes, but is not limited to, the following:

- 1. <u>I/I Removal Approach</u>: The Report should indicate the criteria the Commission will use to designate I/I sources for removal, for both infiltration and inflow sources. It is not clear if all or only a portion of the inflow sources identified will be targeted for removal, or if cost-effectiveness analyses will drive the elimination of infiltration sources. It is noted that priority will be given to removing sources which will reduce CSO discharges at CSO 003.
- 2. Meter Areas 1 7: The Report notes that the Commission conducted inflow investigations in the Summer and Cottage Street areas in the past, which will be used to design inflow removal projects in these areas. The Report cites the many inflow sources (over 500) found but does not indicate if any have been removed. The Commission must submit the Summer & Cottage Street Combined Sewer Separation Project Inflow Investigation Project Report (1998) to supplement the I/I Report. Further, the information provided for recommended "Project 1" indicates that additional field investigations for inflow sources will take place in these areas. The Commission should provide more detail on the scope of this effort, and how such work is being coordinated with the work and findings identified in the 1998 Report.
- 3. <u>Inflow in Meter Areas 8 14</u>: The Report indicates that extensive inflow investigations and removal were done in these meters areas (including 10,000 building inspections and removal of 362 inflow sources). Based on this work done, the I/I Report recommends no further inflow investigations in these areas. When the inflow metering data (Table 3) is adjusted to reflect area footprint (inch-miles of pipe), Meter areas 1 7 do have higher concentrations of metered inflow. However, Meter area 8 still ranks high even with this metric, and inflow investigations and removal should be included in the early phases of the recommended I/I Plan.
- 4. <u>Budget/Schedule</u>: Neither the project schedule (Appendix H) nor the recommendations included in the Report identify any costs or budget for the recommended plan. MassDEP cannot determine the adequacy of the proposed project schedule without this information.

The Lynn Water & Sewer Commission remains subject to the terms and conditions of the Third Modified Consent Decree, as amended on April 16, 2018. The Commission's I/I Plan is a required element of the TMCD. In accordance with paragraph 31 of the TMCD, the Commission shall provide responses to the deficiencies MassDEP has included in this letter on or before March 8, 2019. MassDEP also notes that the I/I Plan must be sufficient to not jeopardize the expected benefits of the CSO abatement plan required under the TMCD.

If you have any questions regarding these comments, please contact Kevin Brander at (978) 694-3236.

Erit Worrall Regional Director

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